

Opening Date: December 19, 2018
Closing Date:
Work Location: Austin, Texas
Posting Number: 19-19
Monthly Salary: \$4,023.17-\$5,239.00*
Group/Class: B21/2464 or 2153/B23
Travel %: 20%
Division/Department: Water Science and Conservation/Surface Water/Bays & Estuaries
Number of Positions: 1

***Salary commensurate with experience and qualifications**

JOB VACANCY NOTICE

Coastal Hydrologist

(Hydrologist III or Engineer III)

REVISED

*Apply Via Mail/Hand Delivery: Texas Water Development Board
Stephen F. Austin Building, 1700 North Congress Ave., Room 670,
Austin, Texas 78701, via facsimile (512) 463-7644, via email
HR@twdb.texas.gov or via Work in Texas (www.workintexas.com).
Refer to Human Resources (512) 475-2142. Equal Opportunity
Employer*

Veteran's Preference

Veterans, Reservists or Guardsmen with an MOS or additional duties that fall in the fields of 680X – LDO-Meteorology/Oceanography, 8831 Environmental Engineering Management Officer, 9S100 – Scientific Applications Specialist, 72D – Environmental Science/Engineering Officer, 510X – SC-Civil Engineer Corps, 32EX – Civil Engineering, or other related fields pertaining to the minimum experience requirements may meet the minimum qualifications for this position and are highly encouraged to apply.

Additional Military Crosswalk information can be accessed at

http://www.hr.sao.texas.gov/Compensation/MilitaryCrosswalk/MOSC_NaturalResources.pdf or

http://www.hr.sao.texas.gov/Compensation/MilitaryCrosswalk/MOSC_EngineeringandDesign.pdf

Job Description Summary

Performs complex to highly complex (journey-level to senior-level) hydrologic analysis and modeling for the Bays and Estuaries Department in the Surface Water Division. Work involves maintaining and executing hydrologic models in support of freshwater inflow estimates as well as conducting scientific analyses of hydrologic data in support of environmental flows and water resources planning. Oversees and participates in the planning, execution, and summary of scientific studies, including assistance with field data collection. Serves as a liaison at public meetings; provides technical support to stakeholder and scientific committees; and, communicates analyses and results to general and technical audiences. May train others. Works under general to limited supervision, with moderate to considerable latitude for the use of initiative and independent judgment. Reports to the Manager of the Bays and Estuaries Department.

Essential Job Functions

- Generates, maintains, and updates the coastal hydrology database of freshwater inflow estimates from rivers and coastal watersheds to Texas estuaries, including obtaining, processing, conducting quality assurance/quality control, and version control of data.
- Calibrates, evaluates, and applies rainfall-runoff models (*e.g.*, TxRR, HEC-HMS, NWM, HL-RDHM, SWAT, *etc.*) to coastal watersheds.
- Plans and executes scientific studies to improve the representation of key hydrological components in coastal freshwater inflow estimations and to aid water resources planning.
- Develops and implements new or improved methods for computing freshwater inflows.
- Writes, executes, and maintains the Python, Linux, Fortran, and ArcGIS programs and scripts.
- Conducts statistical or graphical analyses of hydrologic data to detect spatial/temporal patterns and trends and to inform environmental flow and water resources planning studies.

Female and minority applicants are encouraged to apply.

Males born on or after January 1, 1960, will be required to present proof of Selective Service registration on the first day of employment or proof of exemption from Selective Service registration requirement. All offers of employment are contingent upon the candidate having legal authorization to work in the United States. Failure to present such authorization within the time specified by the U.S. Department of Labor will result in the offer being rescinded. Candidates must be eligible to work in the United States without requiring sponsorship. Only applicants interviewed will be notified of their selection or non-selection. Resumes will not be accepted in place of a completed State of Texas application unless indicated.

HR-002 (Non-Supervisory)

Revised 5/25/2018

Texas Water 
Development Board

The Texas Water Development Board does not discriminate on basis of race, color, national origin, sex, religion, age, or disability in employment or provision of services, programs, or activities. Please visit TWDB Career Page: <http://www.twdb.texas.gov/jobs/> for more information.

TWDB participates in E-Verify! Information from each new employee's Form I-9 will be provided to the Social Security Administration (SSA) and, if necessary, the Department of Homeland Security (DHS) to confirm work authorization.

Job Vacancy Notice (cont.)

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- Maintains and posts updates of coastal hydrology data and technical memos to the agency website.
- Writes, reviews, and evaluates technical memos, reports, work process, and policy documents.
- Provides presentations and informational material to technical and non-technical audiences.
- Assists with field studies, including planning, on-site work, equipment installation, data acquisition, and data management.
- Serves as liaison and provides technical support and information to stakeholder groups, scientific committees, and customers.
- Seeks and supports opportunities to collaborate with academia, consulting firms, federal and state agencies, and other stakeholders to improve coastal hydrology datasets.
- Serves as contract manager for research and monitoring contracts.
- Maintains confidential and sensitive information.
- Ensures individual and team files (electronic and hard versions) are appropriately maintained and timely disposed of in accordance with the agency's records retention procedures and schedule.
- Maintains required certifications and licenses and meets the continuing education needs and requirements of the position to include attending mandatory training courses.
- May be required to operate a state or personal vehicle for business purposes, including the transport and operation of boats and equipment.
- Requires work outdoors, occasionally in small boats, possibly during inclement weather or under hot/cold temperatures.
- Requires work days to occasionally exceed eight hours, including early mornings, late nights and weekends.
- May travel up to 20% of the time.
- Performs other duties as assigned.

Minimum Qualifications

- Graduation from an accredited four-year college or university with major coursework in Hydrology, Geology, Oceanography, Civil Engineering, or related fields with emphasis in hydrology or water resources.
- Five years of experience in applying hydrologic/hydraulic or geophysical models and analyzing hydrologic data for seasonal characteristics and trends to inform water resources applications.
- Engineer III – Licensed as a Professional Engineer by the State of Texas is required to meet the minimum qualification.
- Hydrologist III – Professional Engineering license is not required to meet the minimum qualification.
- Education and experience can be substituted on a year-for-year basis.

Preferred Qualifications

- Graduate degree, or working towards completion of a graduate degree, from an accredited college or university with major coursework in Hydrology, Geology, Oceanography, or Water Resources.
- Previous experience in conducting surface water hydrology studies.
- Previous experience conducting quality assurance/quality control of scientific measurement data.
- Previous experience accessing, processing, displaying, and analyzing large scientific datasets.
- Previous experience in project management and project reporting.
- Familiarity with the hydrology, climatology, and geology of Texas.

Knowledge, Skills, and Abilities (KSAs)

- Knowledge of local, state, and federal laws and regulations relevant to the Bays and Estuaries Department, including water management and environmental flows in Texas, and of the principles and practices of public administration.
- Knowledge of scientific, engineering, statistical, modeling, and hydrologic principles and techniques.
- Knowledge of the practical application of hydrology, water quality, and water management technologies.
- Skills in using Microsoft Office programs such as Word, Excel, and Access.
- Skills in use of internet, email, word processing, spreadsheet, presentation, and database software.
- Skills in scientific data collection, management, and interpretation, particularly of hydrologic data.
- Skills in using and applying models, particularly rainfall-runoff models, and statistical procedures.

Job Vacancy Notice (cont.)

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- Skills in programming/scripting languages, such as Python, Fortran, Matlab, or equivalent, for developing and modifying software and scripts for conducting analyses and to maintain automated processes.
- Skills in spatial data analysis techniques (*e.g.*, ArcGIS, *etc.*).
- Skills in multivariate statistics or predictive modeling.
- Ability to meet public/government officials to initiate studies and to request data pertinent to studies.
- Ability to lead scientific studies/field operations and perform duties as assigned without direct supervision.
- Ability to adhere to work schedules, follow procedures with respect to leave, and submit accurate timesheets by prescribed deadlines.
- Ability to make mature, objective decisions and identify areas of potential problems.
- Ability to perform effectively and willingly when changes occur in scope and nature of the work and work environment.
- Ability to perform routine and non-routine work assignments accurately and on-time with little or no supervision.
- Ability to perform assigned duties and improve work habits and/or output.
- Ability to complete assigned work, on time, neatly and with infrequent errors.
- Ability to interpret policies, procedures, and regulations.
- Ability to provide prompt, courteous and accurate assistance and clear and concise communication to internal and external stakeholders both verbally and in writing.
- Ability to work and cooperate with others in a team environment and accept assignments from multiple authorities.
- Ability to manage multiple tasks and schedule work to maintain regular progress on assignments and meet deadlines.
- Ability to stand/sit/move with no physical limitations or aids to perform activities such as retrieve/replace files in a large file system for boxes up to 30 lbs.
- Ability to lift and carry 30 lbs. over varying terrain, carry equipment in varying weather, and to work in small boats.
- Ability and willingness to travel 20% of the time, primarily within the State of Texas.
- Ability to operate a vehicle (state or personal) for state business and maintain a driver's license and driving record that complies with state and agency requirements.
- Ability to operate and transport motorized boats up to 25-ft length safely, effectively, and independently or a willingness to learn.
- Ability to work days that may exceed eight hours, including early mornings, nights, and weekends.
- Ability to train others.

Remarks

- Copy of required academic transcripts and/or licensures and driving record must be submitted at the time of hire. Failure to provide required documentation will result in no further consideration for employment.
- Important Notice: Otherwise qualified candidates who are ultimately considered for potential employment with the Texas Water Development Board may be the subject of a request for any criminal history record information maintained by the Texas Department of Public Safety (DPS). Evidence of a criminal conviction or other relevant information obtained from the DPS shall not automatically disqualify an individual from employment with the Texas Water Development Board.